

**AGATHIS THOMPSONI N. SP., A NEARCTIC SPECIES OF
AGATHIDINAE (HYMENOPTERA: BRACONIDAE)
PARASITIC ON GREYA SUBALBA (BRAUN)
(LEPIDOPTERA: INCURVARIIDAE)**

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Abstract.—Adults of *Agathis thompsoni* n. sp. (Braconidae: Agathidinae) from north-western U.S.A. are described and illustrated. Larvae are parasitic on *Greya subalba* (Braun), which feeds on the schizocarps of *Lomatium* spp. (Umbelliferae). Females of the new species are differentiated from those of both European and North American species.

Among the many undescribed species of *Agathis* Latreille in North America is one that has been studied by J. N. Thompson (Thompson, 1986). It is to compliment his research on oviposition behaviour and searching efficiency that I describe this new species.

***Agathis thompsoni* Sharkey, NEW SPECIES**

Diagnosis.—*Agathis thompsoni* is distinguished from other species of *Agathis* by the following combination of character states: basal flagellomere $1.6\times$ longer than following flagellomere; malar space $0.6\times$ greatest diameter of eye; ovipositor $1.2\times$ as long as metasoma when fully extended.

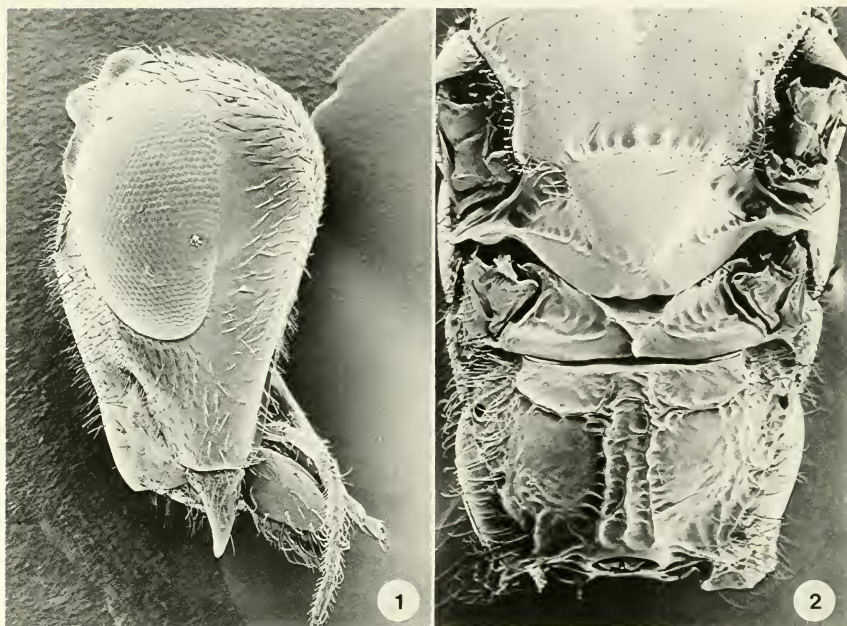
Description. holotype ♀.—(Intraspecific variation is given in parentheses). *Color:* Black except metasoma slightly paler laterally and yellowish-orange as follows: mandible, all femora over distal 0.7, fore and middle tibiae, hind tibia except for basal and apical melanic bands, basal 0.2 of all basitarsomeres; fore wing hyaline. *Head* (Fig. 1): Antenna with 26 (23-26) flagellomeres; basal flagellomere $1.6\times$ longer than following flagellomere; head subrostriform, malar space $0.6\times$ greatest diameter of eye; weak, V-shaped depression anterior to median ocellus; smooth, longitudinal ridge

from near median ocellus to level of antennal insertion; galea $2.2\times$ longer than maximum width. *Mesosoma* (Figs. 2, 3): Notauli deeply impressed, pitted, scutellar groove with numerous longitudinal ridges; pronotum smooth except for crenulae along posterior margin; sternaulus $0.7\times$ length of mesopleuron and complete to posterior margin; metapleuron rugose over ventral 0.2 (0.2-0.3); propodeum with transverse, anterolateral ridge and with 3 longitudinal ridges, medial ridge weak; (propodeum may be somewhat rougher than in Fig. 2); mid tibia with 3 (2-3) preapical spines; hind tibia with 6 (4-6) apical spines; hind tarsal claw with strong basal tooth. *Metasoma* (Fig. 4): First tergum as long as wide, with pair of weak longitudinal ridges and weak striae over anterior 0.5; tergum 2 + 3 mostly smooth with basal swelling; ovipositor $1.2\times$ longer than metasoma when fully extended; ovipositor sheaths slightly shorter ($0.9\times$) than metasoma. *Length:* 3.7 (3.5-4.3) mm.

Allotype ♂.—As for the holotype except antenna with 23 flagellomeres. (Left hind leg missing after coxa).

This species is named after John N. Thompson.

Material examined.—Holotype ♀, U.S.A., Washington, Whitman Co., Smoot Hill Biol.



Figs. 1, 2. *Agathis thompsoni*. 1, Head, lateral. 2, Metanotum and propodeum, dorsal.

Pres. nr. Albion, ex. *Greya subalba* (Braun), 5.VI.1985, J. N. Thompson, (United States National Museum). Allotype ♂, same data as holotype except date, 17.VI.80. Paratypes: 38 ♀, same data as holotype, (Canadian National Collection, United States National Museum). 1 ♂, same data as allotype, (Canadian National Collection).

Discussion.—In a recent paper (Sharkey, 1985) I defined my concept of *Agathis* Latreille. The following Nearctic and Holarctic species belong to this genus: *A. brevicornis* (Muesebeck), *A. cupressi* Muesebeck and Walkley, *A. gibbosa* (Say), *A. malvacearum* Latr., *A. pumila* (Ratzburg), *A. rubripes* Cresson, *A. terminata* Cresson, *A. thompsoni* Sharkey, *A. tibiator* Provancher.

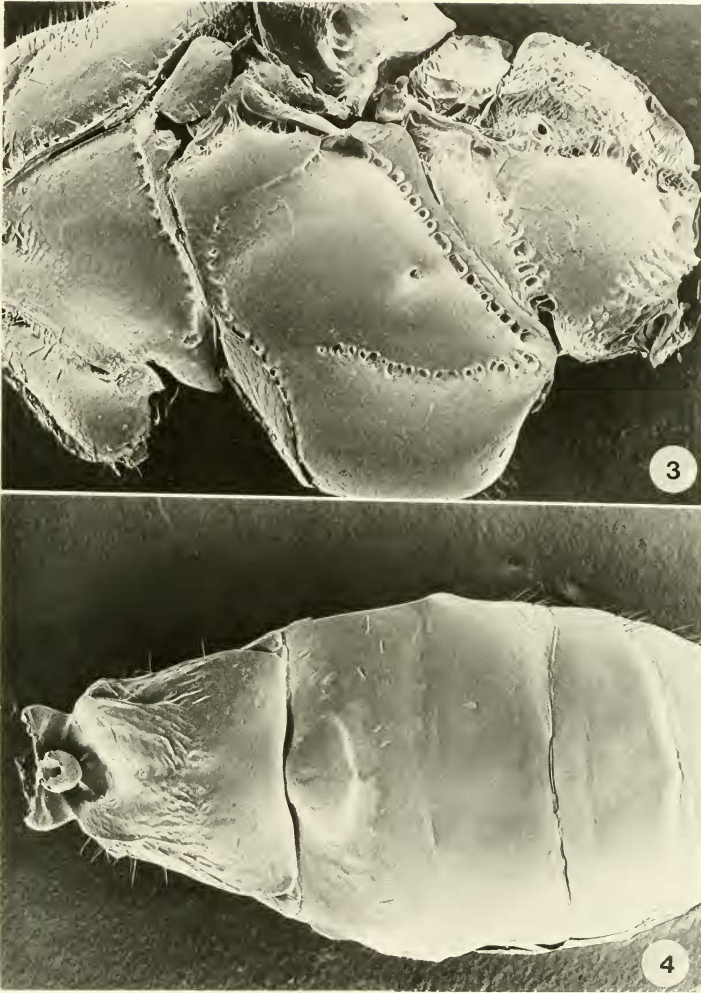
Females of *A. thompsoni* differ from those of most other North American species of *Agathis* by their short ovipositor, which is only 1.2× as long as the metasoma when

fully extended. Other species have the ovipositor fully as long as the body except *A. pumila*, a Holarctic species. Unlike *A. thompsoni*, *A. pumila* has the two most basal antennal flagellomeres subequal in length.

In Nixon's (1986) key to the European females of *Agathis*, *A. thompsoni* keys to couplet number 30. Females differ from those of five of the six species that key through this couplet by their short ovipositor. Females of *A. melpomene* Nixon, which also have a short ovipositor, differ in that the first tergum of the metasoma is mostly smooth, though sometimes with weak rugosity medially. Females of *A. thompsoni* have striae in the anterior 0.6 of the first metasomal tergum.

ACKNOWLEDGMENTS

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Figs. 3, 4. *Agathis thompsoni*. 3, Mesosoma, lateral. 4, Metasoma, dorsal.

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ANNOUNCEMENT

With this issue the *Proceedings* begins a two-column format not including titles and abstracts. This is a cost-saving measure that the Publications and Executive Committees believe does not sacrifice utility or beauty. The new format should allow for some growth in the number of articles without the bound volume becoming too large. Space saving comes mainly from fitting narrow tables and plates into only one column rather than having them extend across a whole page. There is also a gain of $\frac{3}{16}$ inch width of print per page.—Editor.